

1 TITLE OF THE INVENTION: CLOSEABLE THATCHED UMBRELLAS

2 FIELD OF THE INVENTION

3 This invention pertains to an umbrella that opens and  
4 closes, and has the authentic appearance of a Pacific Island  
5 or Carribean thatch umbrella, yet it protects you from the  
6 rain.

7 BACKGROUND OF THE INVENTION

8 Many tourists from the west coast of the United States  
9 spend their holidays in Hawaii or in other south sea islands  
10 such as Tonga or Fiji. People from the east coast spend their  
11 warm climate holidays in the islands of the Carribean Sea. In  
12 all of these locations, one will note thatch umbrellas dotting  
13 the landscape. Such thatched umbrellas may be woven from such  
14 materials as banana leaves, palm leaves, sugar cane and other  
15 indigenous materials.

16 It is also known that in the tropical areas, thatching is  
17 used as a mode of building construction. Thatched roofs  
18 normally, however, are 6 to 12 inches thick, in order to try  
19 to keep out the tropical rains. Sometimes they succeed and  
20 sometimes they do not.

21 On the other hand, it is well known that the thatched  
22 umbrellas, serve only to protect one from the tropical sun and  
23 not from the tropical rain. That is because the thatching of  
24 the umbrellas is normally only 1 to 3 inches thick. In essence  
25 they "leak like a sieve".

26 American homeowners, and especially those in the warmer  
27 climates of California, Arizona, New Mexico and Florida love  
28 the appearance of thatched umbrellas, but the practical side,  
29 which dictates a need for protection from the rain as well as  
30 protection from the sun, comes into play.

31 Therefore it is one object of this invention to provide  
32 an umbrella that has the appearance of a South Seas thatched  
33 umbrella.

34 It is another object of the invention to provide a  
35 tropical appearing thatched umbrella that protects persons  
36 beneath the umbrella from the rain.

37 It is a third object of this invention to provide a  
38 thatched umbrella that can be opened and closed as may be

desired, particularly in the case of high winds.

It is yet another object to provide a thatched umbrella that may be made in large sizes such as anywhere from 6 to 12 feet in diameter.

It is still another object to provide a thatched umbrella that can be readily stowed away during periods when nonuse is desired.

A yet further object is to provide a thatched umbrella that is readily portable and relatively light in weight.

Other objects of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises the device possessing the features properties and the relation of components which are exemplified in the following detailed disclosure and the scope of the application of which will be indicated in the appended claims.

For a fuller understanding of the nature and objects of the invention reference should be made to the following detailed description, taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE FIGURES

FIG. 1 is a top plan view of a jig used to make the thatch covering forming part of this invention

FIG. 2 is a top plan view of a continuously woven thatch annulus prepared according to this invention.

FIG. 3 is a diagrammatic view illustrating the various layers involved in this structure.

FIG. 4 is a sectional view of the umbrella of this invention to illustrate the assembly thereof.

FIG. 5 is a perspective view of the umbrella of this invention in open position.

FIG. 6 is a perspective view of the umbrella of this invention in closed position.

FIG. 7 is a detailed sectional view of an alternative typical umbrella mode of construction that can be employed with this invention.

FIG. 8 is a top plan view of an alternate embodiment of the thatch overlay, wherein the woven thatch is configured as a disk.

**SUMMARY OF THE INVENTION**

A thatched umbrella having the appearance of an authentic South Sea Islands umbrella, yet possessing all the practicality of a garden umbrella in that it protects the persons beneath it from the rain. The umbrella can be opened and closed as needed for transportation, relocation, and storage.

The device of this invention comprises a layer of a continuously woven circular thatch attached to an acrylic or other water resistant fabric canopy mounted to an openable-closeable umbrella frame.

## DESCRIPTION OF THE PREFERRED EMBODIMENT

In FIG. 1 there is seen a circular jig which may range from about 6 to 12 feet in diameter, though larger and smaller diameters are also envisioned. The diameter of the jig will correspond to the ultimate diameter of the umbrella to be manufactured according to this invention.

*Shdw* Jig 10 comprises a circular hoop 11 having a plurality of spaced ribs or radii 12. <sup>sub B</sup> ~~Here 8 are shown.~~ The number of radii may be larger or smaller than 8, as may be desired. Spaced preferably uniformly along the length of each of the radii are a series of guide pins, 13 which pins serve to retain the thatch material in place during the course of the weaving process. If the radii are metal stamps or extrusions, the guide pins 13 may be attached to the metal radii as by welding, brazing, gluing or any other known means of securing. The radii may also be wood struts, in which case the guide pins can be attached as by nailing, screwing, or gluing. The hoop 11 is most appropriately metal such as flexible steel or aluminum though wood or plastic construction is also contemplated.

Center point 14 denotes the intersection of all of the radii 12. The thatch annulus 20 may be woven in any particular pattern as is known to those of ordinary skill in the weaving art.

In FIG. 2, the continuously woven circular thatch is configured as a thatched annulus, 20. It is within the ready skill of a weaver, to prepare a continuous thatch circle the diameter of which would match the diameter of the jig being employed. The leaves used for the thatch may be coconut palm, banana palm, sugar cane or any other long pliable leaf that can be woven by methods handed down from generation to generation. The actual weaving technique employed is not related to this invention. The center opening 21 of the woven annulus, permits the thatch to be applied to the umbrella structure by overlaying the thatch annulus on a canopy followed by the addition of a finial.

It is also within the scope of the application to employ as the continuously woven circular thatch, a thatched disk 20-D instead of an annulus. That is, there would be no central

opening. <sup>Sub Bn</sup> ~~Such a disk configuration would be utilized if the construction of the umbrella were to omit a top finial. See FIG. 8.~~

Reference is now made to FIG. 3, which shows the layers that form the umbrella structure of this invention. In this figure, 20 represents the thatch layer as has been denoted in FIG. 2. The acrylic or other material canopy found in a umbrella is designated layer 25, while the layer 32 designates the wood or metal rib of the umbrella to which the thatch is attached with the canopy layer being interposed there between. For reference, it is seen that the canopy has an exterior surface and an interior surface. The interior surface overlays the umbrella frame, and the exterior surface of the canopy interfaces the woven thatch.

FIG. 4 is related to FIG. 3 in that shows the relative disposition of the various layers that form the construction of the umbrella. Here the thatch 20 is seen to be overlaid upon the canopy layer 25. Suitable canopy materials include the previously noted acrylic, as well as polyester, nylon, cotton and canvas. Woven acrylic fabric of about 9.5 oz is the preferred canopy material.

In the umbrella construction illustrated, the series of spaced ribs 32, are seen to have an optional small reinforcing gusset 33 spaced at various locations along the length thereof for added strength.

To permit the opening and closing of the umbrella, each rib 32 includes a small rib arm 37 disposed normal to the length of the rib. Each rib arm, at one end, includes a suitable aperture for connection of a strut 34 by pin 38 which passes through an unseen aperture in said strut to connect the strut to the rib arm, 37. The rib arm at its opposite end is connected in conventional fashion to hub 35. Hub 35 is disposed in conventional fashion on pole 36.

The reader's attention is turned now to FIG. 7, which is a partial recreation of FIG. 3 of applicant's U.S. Patent 5,020,557 issued June 4, 1991. This now prior art patent illustrates yet another means of connecting a strut 34A to the rib 32A, which strut is connected to hub 35A. The disclosure

1 of the Apple patent 5,020,557 is incorporated herein by  
2 reference to help emphasize the point that there is no  
3 criticality to the construction employed for the struts, ribs,  
4 hub and pole of the invention of this application.

5 Returning to FIG. 4, it is seen that the thatch is applied  
6 through the canopy layer to each of the spaced ribs, by  
7 utilizing a series of screws 26 for example, as is shown in the  
8 figure. If the ribs are wood, then common wood screws,  
9 preferably of a galvanized or stainless steel material should  
10 be employed. If the ribs are of metal, then self-tapping  
11 screws commonly used in the metal arts also preferably of  
12 stainless steel, brass or galvanized material should be  
13 employed.

14 When the thatch annulus is overlaid on the canopy, the  
15 central opening is fitted over the pole. This helps to align  
16 the thatch to the canopy. Once the thatch is secured as  
17 discussed infra, the finial is attached on the top of the pole  
18 by any means known to the art.

19 As to the opening and closing aspect of the umbrella, any  
20 conventional opening and closing mechanism, such as the one  
21 disclosed in the aforementioned Apple patent may be employed  
22 to open and close the umbrella of this invention upon demand  
23 of the user. The opening and closing mechanism is disposed  
24 upon the pole of the umbrella.

25 \*\*\*\*\*

26 In conclusion it is seen that by employing a continuous  
27 one piece thatch annulus, and overlaying it upon a rain  
28 retarding canopy attached to an umbrella frame, securing the  
29 thatch to the umbrella frame, with the annular opening fitting  
30 over the pole, and then adding a finial to the top of the  
31 pole, I have provided what appears to be a South Seas thatched  
32 umbrella, with all of the practicality associated with a rain  
33 retarding garden umbrella, that lessens the amount of rain to  
34 impact persons therebeneath.

35 Since certain changes may be made in the described device  
36 without departing from the scope of the invention herein  
37 involved, it is intended that all matter contained in the above  
38 description and shown in the accompanying drawings shall be

